

Plastic bullets—a reasonable force?

After the brutal killing of a police constable by rioters in London, police are now authorised to fire plastic bullets on the streets of mainland Britain. These are lethal weapons

Jonathan Rosenhead



The mainland debut of plastic bullets: officers of the Metropolitan Police's Tactical Firearms Squad in Tottenham

SIR KENNETH NEWMAN, commissioner of the Metropolitan Police, warned Londoners last week that plastic bullets could be fired on the capital's streets. "I wish to put all people of London on notice," he said, "that I will not shrink from such a decision."

The night before, during disturbances at Broadwater Farm Estate in Tottenham, North London, members of the Metropolitan Police's tactical firearms unit had appeared on the streets with plastic-bullet cartridges slung around their waists. We are now within an ace of a decision to fire them for the first time on the streets of mainland Britain.

To many people, Newman's decision must have seemed a modest response. One of his constables had just died of stab wounds received at the disturbances in Tottenham; other policemen had been injured by shots from a pistol and shotgun. But most British people have no experience of the effects of plastic bullets. Although security forces in Northern Ireland have fired 43 000 plastic bullets, which have killed 12 people, the lack of knowledge is still profound.

Why do the police need plastic bullets? The police themselves give two reasons. First, plastic bullets keep stone-throwers out of range. Secondly, firing plastic bullets will disperse a crowd. Plastic bullets work

by causing pain, or the fear of pain, resulting from the impact of a projectile roughly the same weight as a cricket ball, but travelling twice as fast as a ball thrown by a good fast bowler (see Box). According to the Home Office's guidelines, police should fire them only if the Chief Constable judges such an action necessary as a last resort, because of the risk to life or serious injury, or the widespread destruction of property.

No one can predict exactly how the Metropolitan Police, or any other security force, would use plastic bullets. But we do have some ideas based on more than 10 years of their use in Northern Ireland.

One finding stands out. The army and police in Northern Ireland have both fired plastic bullets for purposes other than to distance crowds or disperse them. Security forces have fired bullets into crowds with no means of escape, and the bullets have inflicted injuries from the rear. Injuries have commonly been to the head and vital organs, despite instructions on the Yellow Cards issued to servicemen that plastic bullets should be aimed at the lower part of the body. Plastic bullets have also been fired at close quarters on isolated individuals (including children) who posed no threat to life or property.

Obviously, the behaviour of security forces in Northern Ireland is a consequence

of the province's special history. But this is no guarantee that similar atrocities will not take place on the mainland.

One argument for the deployment of plastic bullets is that, although they can kill, their net effect is to save lives. In fact, the bullets are rarely fired when security forces are under lethal threat. Only one out of the 740 soldiers and police officers killed in the Northern Ireland troubles died in riot conditions. As ex-chief constable John Alderson put it: "No members of the IRA have been shot with plastic bullets. When you shoot at terrorists, you use real bullets."

Neither is there any statistical evidence to support the idea that the number of plastic bullets fired relates to the risk of death, either among soldiers or civilians. Between the years 1976 and 1981, violence in Northern Ireland claimed roughly the same number of lives each year. But in 1981, security forces fired 29 665 baton rounds, compared with fewer than 1300 in each of the previous two years. No movement in the death rate accompanies this dramatic upsurge.

What the figures illustrate is that the number of plastic bullets fired does not respond in any simple way to lethal violence from "the other side". Rather, it reflects the political feasibility of using the weapons, which depends on the state of public opinion. The outcome of such calcu-

**Ammunition for protesters:
plastic bullets have killed 12
people, half of them children,
in Northern Ireland**

lations can change rapidly. As recently as September 1984, a deputy assistant commissioner of the Metropolitan Police said that plastic bullets could be fired if London were "burning down". Only 13 months later, Sir Kenneth Newman said that he might well judge plastic bullets to be reasonable force in circumstances "similar to those we have encountered lately". In the Tottenham riots, not even Broadwater Farm, let alone London, was burning down.

The force of plastic bullets can be gauged from medical evidence about the injuries inflicted. Surgeons in Northern Ireland have collected and analysed these data for both plastic bullets and the rubber bullets they replaced. One study noted the injuries received by 99 patients treated at one hospital in Belfast in mid 1981.

Injuries received, apart from bruises, abrasions and lacerations to the face and scalp, included five fractures of facial bones, eight skull fractures, six of which involved major brain injury, one other case of injury to the brain, one blinding, and one severe loss of vision in an eye. Other people suffered fractures to the hand, leg and foot, others broken ribs, contusions to the lung, and injuries to the liver and spleen. The rate of injuries per round fired, and the severity of injuries caused, differed little from those of rubber bullets. However, this is not true of the death rate. Rubber bullets killed only one person for every 18 000 rounds fired. For plastic bullets, the death rate is one fatality per 4000 rounds fired.

The plastic bullet is a formidable weapon. Earlier "riot control" weapons



used in Northern Ireland were water cannon and CS gas. Each new weapon has been more severe than the one it replaced.

Plastic bullets, the latest link in the chain of escalation, are the most dangerous "crowd control" weapons in service with security forces anywhere in the Western world. Tests by the US Army on animals identified a threshold for the kinetic energy of impact weapons of 122 joules. Impacts above this level fall into the "severe damage region". A plastic bullet's energy at its extreme range of 50 metres is 150 joules, where at five metres its energy level is 285 joules.

In Britain, the death or serious injury of

a demonstrator or picket is a rare event. When plastic bullets slide into acceptable and regular use, this situation will change. Many victims will be passers-by, or the unwitting objects of police frustration or hostility. No alternative technology is likely to be more acceptable. Security forces have already rejected as ineffective CS gas and water cannon. Novel technologies such as the electrified water jet, or the dart gun which fires electrified wires, are not likely to be acceptable.

There can be no technological solution to urban disturbances. Crowd-control weapons are deployed almost randomly against a crowd made up of individuals with different physiologies. If the weapons are "robust" enough to deter or disperse the most committed rioter, then they will kill or injure the weak or unlucky. But the logic goes further. If, despite the inevitable casualties, a sufficiently

severe weapon is deployed the experience in Northern Ireland suggests that violence will get away. □

Jonathan Rosenhead, a senior lecturer in operational research at the London School of Economics, is joint author of *TechnoCop* (Free Association Books, 1985).

What the bullets are

THE PLASTIC BULLET (or baton round) is a solid cylinder of PVC, 38 millimetres in diameter and 10 centimetres long. It weighs 135 grams, and leaves the muzzle of a riot gun at between 210 and 270 kilometres per hour.

A plastic bullet's maximum effective range is 50 metres, but a long-range version works up to 70 metres. The British Army's rules of engagement state that plastic bullets should not be fired at ranges of less than 20 metres "except where the safety of soldiers or others is threatened".

Plastic bullets first came into service with the Army in Northern Ireland in 1973. By 1975, they had replaced the rubber bullet as the principal "riot control" weapon. The Army and the Royal Ulster Constabulary have so far fired more than 43 000 plastic bullets. Twelve people have died as a result, the youngest aged 10 and the oldest aged 45. Six of the victims were aged 15 and under.

In the two years from March 1981, 206 people received treatment in hospital for injuries caused by the firing of plastic bullets.

Until 1981, the firm Pains-Wessex Schermuly made plastic bullets for the Ministry of Defence. Nowadays, most are supplied from the Brocks fireworks factory in Dumfriesshire, but the Ministry of Defence still makes some itself. Police forces obtain plastic bullets from the Ministry of Defence.

Plastic bullets, along with CS gas and water cannon, were authorised for issue to British police forces in the aftermath of the inner-city riots of 1981. No police officers have fired the bullets except in training.

Only 12 of the 43 police forces in England and Wales now have plastic bullets. About 20 000 rounds are in store, mainly in London. No figures are available for the Army's stocks. □

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